



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

RBW1805G01731-3G-5
Job Sheet 183053



JS #41

9-11

Part No: RBW1805G01731-3G-5

Job Qty: 80 ea

Part Name: Button



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 9/11/18

Job Tracking No:

Due Date: 9/24/18

Created By: Logan David

Type: SOLD

Description:

Note: DWG RBW1805G01731-3G REV 3 IPP REV A 18.02.20 NEW ISSUE FK VERIFY DP

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	80 Ea	9/24/18	9/24/18	0.00	0.00	Start Up Machining-4		JB 18-10-17
120	CNC Lathe	80 pcs	9/24/18	9/24/18	0.00	13.33	MORI SL-154		JB 18-10-17
130	QC	80 pcs	9/24/18	9/24/18	0.00	0.00	QC2 Machining-5		JB 18-10-17
140	QC	80 pcs	9/24/18	9/24/18	0.00	0.00	QC8 Machining-5		JB 18-10-17
150	Outsource	80 pcs	9/24/18	9/24/18	0.00	0.00	Outsource1		9-89 18/10/18
155	Outsource	80 pcs	9/24/18	9/24/18	0.00	0.00	Outsource12		
160	Packaging	80 pcs	9/24/18	9/24/18	0.00	0.00	Packaging2		
200	QC	80 pcs	9/24/18	9/24/18	0.00	0.00	QC6		
210	Packaging	80 pcs	9/24/18	9/24/18	0.00	0.00	Packaging3-2		MCC
220	QC21-SA	80 Ea	9/24/18	9/24/18	0.00	0.00	QC21		21

Part Op 120 - 1-Machine as per folio FB922 FOLIO REV: _____ DWG REV: _____ 2-Deburr _____
 Descriptions: 150 - 1-Issue P/O to Metcore ; P/O _____ RC 50-55 2-Bead blast 3- Certificate of Conformity is required
 NOTE DROP SHIP TO FINISHER Metcore to ship directly to Groupe Altech***
 155 - -Issue P/O to Groupe Altech; PO _____ -Black oxide finish, MIL-C-13924C Class 1 -Certificate of Conformity is required
 160 - Receive
 210 - IDENTIFY AND STOCK

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
MT-4140-R0.625	AISI 4140 Round Bar	2.4000 ft (.03 ea)	90-Start up Operation	5118781 5060873

Job Allocations



Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL : 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Required	Inventory	Allocated
2	16	0

Container No: S119337



Part: RBW1805G01731-3G-5

Job No: 183053

Serial No/Batch: S119337

Revision: 3

Inspector:

Exp Date:

Instructions:

Date: 10/17/18

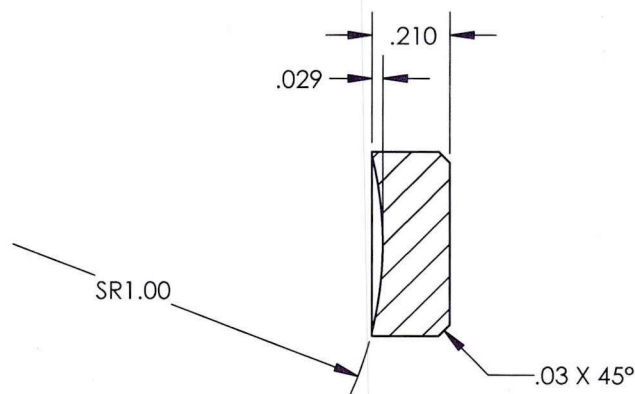
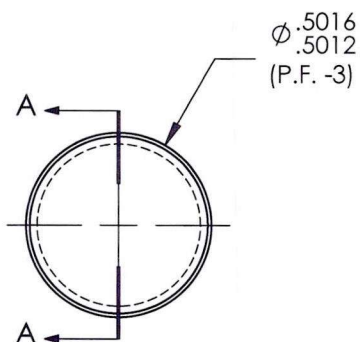
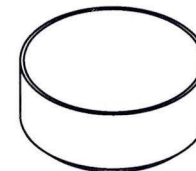
tions

not be found.

Plex 9/11/18 2:01 PM dart.logan.david

This drawing, specifications, and concepts contained here in are the sole property of Dart Aerospace, and may not be reproduced or used in any fashion without the prior written permission of Dart Aerospace Eugene, OR.

REVISIONS					
REV	ECR	DESCRIPTION	DATE	INITIAL	APPROVED
2	15-0288	-5 CH'D MATERIAL CALLOUT WAS 4140 IS 4140/4142.	9/2/2015	RJC	JAG
3	17-0143	-5 CH'D DIMS WAS Ø.500 IS Ø.5016/.5012 (P.F. -3), WAS R1.00 IS SR1.00. ADDED DIM .03 X 45°.	6/19/2017	RJC	JAG



SECTION A-A

(-5)
BUTTON

DART AEROSPACE	
TITLE MVA REMOVAL TOOL	
DWG NO. RBW1805G01731-3G-5	REV 3
MAT'L 4140/4142	UNLESS OTHERWISE SPECIFIED
HEAT TREAT HRC 50-55	DIMENSIONS ARE IN INCHES
FINISH BLACK OXIDE	.XXX ± .005 FRACTIONS ± 1/8
SPEC QMSI-6.2.2, B.O. REV D	.XX ± .01 ANGLES ± 5°
DRAWN BY: RJC 06/19/2017	X ± .1 SURFACES = 125/
CHECKED: DD 06/22/2017	1. BREAK ALL SHARP EDGES
OPPS APPR: AA 06/26/2017	.015 x 45° OR .015R
QA APPR: JL 06/28/2017	2. DIMENSIONAL LIMITS APPLY
APPROVED: JAG 07/03/2017	AFTER PLATING
SCALE 2:1	3. INTERPRET DIM AND TOL PER ASME Y14.5M-2009
DATE 6/19/2017	USED ON MODEL
	AW139
	SHEET 4 OF 6

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed:

Date: _____

Work Order update only ☐

Work Order: <u>189053</u> Part No. <u>RBW1805G01731-3G-3/-5</u> NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS <table style="width:100%; font-size: small;"> <tr> <td>Skid-tube ☐</td> <td>Cross tube ☐</td> <td>Water Jet ☐</td> <td>Engineering ☐</td> </tr> <tr> <td>Machining ☐</td> <td>Small Fab ☐</td> <td>Prod. Eng. Coord. ☐</td> <td>Quality ☐</td> </tr> <tr> <td>Thermoforming ☐</td> <td>Finishing ☐</td> <td>Rec/Store/Packaging ☐</td> <td>Other ☐</td> </tr> <tr> <td>Large Fab ☐</td> <td>Composite ☐</td> <td>Supplier ☐</td> <td></td> </tr> </table>						Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																																																							
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																																																																																																												
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																																																																																																												
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																																																																																																												
Large Fab ☐	Composite ☐	Supplier ☐																																																																																																													
Date :		Step #:		QTY Effective :		MRB (QSI042) Approval DAS 12 9-08 April 04, 2018																																																																																																									
Description Work Order Deviation				Disposition																																																																																																											
RBW1805G01731-3G-3 Dimension .5007/.5004 changed for .5000/.5007 (Per VM) RBW1805G01731-3G-5 Dimension .5016/.5012 changed for .5008/.5012 (Per VM) - MANUFACTURE RBW1805G01731-3G-5 FROM 440C SS CM-MASTER 1328T68) HEAT TREAT AND BLACK OXIDE NOT REQUIRED <i>MLee</i>				- This deviation is acceptable. - The fit, form and function of the part will be as originally intended.				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																																																																							
<table border="1" style="width:100%; font-size: x-small; border-collapse: collapse;"> <thead> <tr> <th colspan="4" style="text-align: left;">Root Cause</th> <th colspan="4" style="text-align: left;">FAULT CATEGORY</th> </tr> </thead> <tbody> <tr> <td>Environment ☐</td> <td>☐</td> <td>No Re-verification ☐</td> <td>Pressure/Forced ☐</td> <td>Temperature/Cure ☐</td> <td>Power Loss/Surge ☐</td> <td>Positioned Wrong ☐</td> <td></td> </tr> <tr> <td>Design ☒</td> <td>☐</td> <td>Operator ☐</td> <td>Bending ☐</td> <td>Set-up ☐</td> <td>Folio/Program ☐</td> <td>Outside Dimensions ☐</td> <td></td> </tr> <tr> <td>Doc/Data ☐</td> <td>☐</td> <td>Offset/Setup ☐</td> <td>Centre Not Concentric ☐</td> <td>BOM/Route ☐</td> <td>Grain ☐</td> <td>Over/Under tolerance ☐</td> <td></td> </tr> <tr> <td>Equip/Tooling ☐</td> <td>☐</td> <td>Supplier ☐</td> <td>Cracks ☐</td> <td>Broken/Damage/Defect ☐</td> <td>Weld ☐</td> <td>Part Incorrect ☐</td> <td></td> </tr> <tr> <td>Handling/Pre ☐</td> <td>☐</td> <td>Training ☐</td> <td>Crimp/Kink/Ripple/Wave ☐</td> <td>Inspection Incomplete/Unqualified ☐</td> <td>Wrong Stock Pulled ☐</td> <td>Part Lost/Missing ☐</td> <td></td> </tr> <tr> <td>Material ☐</td> <td>☐</td> <td>Use for Testing ☐</td> <td>Cuffs ☐</td> <td>Contamination ☐</td> <td>Out of Sequence ☐</td> <td>Part Moved ☐</td> <td></td> </tr> <tr> <td>Internal Transport ☐</td> <td>☐</td> <td>Poor Information ☐</td> <td>Crushing ☐</td> <td>Countersink ☐</td> <td>Off-set ☐</td> <td>Drawing ☐</td> <td></td> </tr> <tr> <td>Tribal Knowledge ☐</td> <td>☐</td> <td>Rushing ☐</td> <td>Heat Treat ☐</td> <td>Cut Too Short ☐</td> <td>Mislabeled ☐</td> <td>Finish ☐</td> <td></td> </tr> <tr> <td>LOA ☐</td> <td>☐</td> <td>Product Improvement ☐</td> <td>Wave/Twist in Tube ☐</td> <td>Instructions Incomplete/Unclear ☐</td> <td>Fit/Function ☐</td> <td>Misread ☐</td> <td></td> </tr> <tr> <td>Substation ☐</td> <td>☐</td> <td>Process Improvement ☐</td> <td>Marks/Chatter ☐</td> <td>Drill Holes ☐</td> <td>Misaligned/off center ☐</td> <td>Turning Sequence ☐</td> <td></td> </tr> <tr> <td>Past Expiry Date ☐</td> <td>☐</td> <td>Manufacturing Process ☐</td> <td colspan="5" style="text-align: center;">OTHER : _____</td> </tr> <tr> <td>Misidentified ☐</td> <td>☐</td> <td>Past Due ☐</td> <td colspan="5"></td> </tr> </tbody> </table>								Root Cause				FAULT CATEGORY				Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐		Design ☒	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐		Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐		Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐		Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐		Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐		Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐		Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐		LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐		Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐		Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : _____					Misidentified ☐	☐	Past Due ☐					
Root Cause				FAULT CATEGORY																																																																																																											
Environment ☐	☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐																																																																																																									
Design ☒	☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐																																																																																																									
Doc/Data ☐	☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐																																																																																																									
Equip/Tooling ☐	☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐																																																																																																									
Handling/Pre ☐	☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐																																																																																																									
Material ☐	☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐																																																																																																									
Internal Transport ☐	☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐																																																																																																									
Tribal Knowledge ☐	☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐																																																																																																									
LOA ☐	☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐																																																																																																									
Substation ☐	☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐																																																																																																									
Past Expiry Date ☐	☐	Manufacturing Process ☐	OTHER : _____																																																																																																												
Misidentified ☐	☐	Past Due ☐																																																																																																													